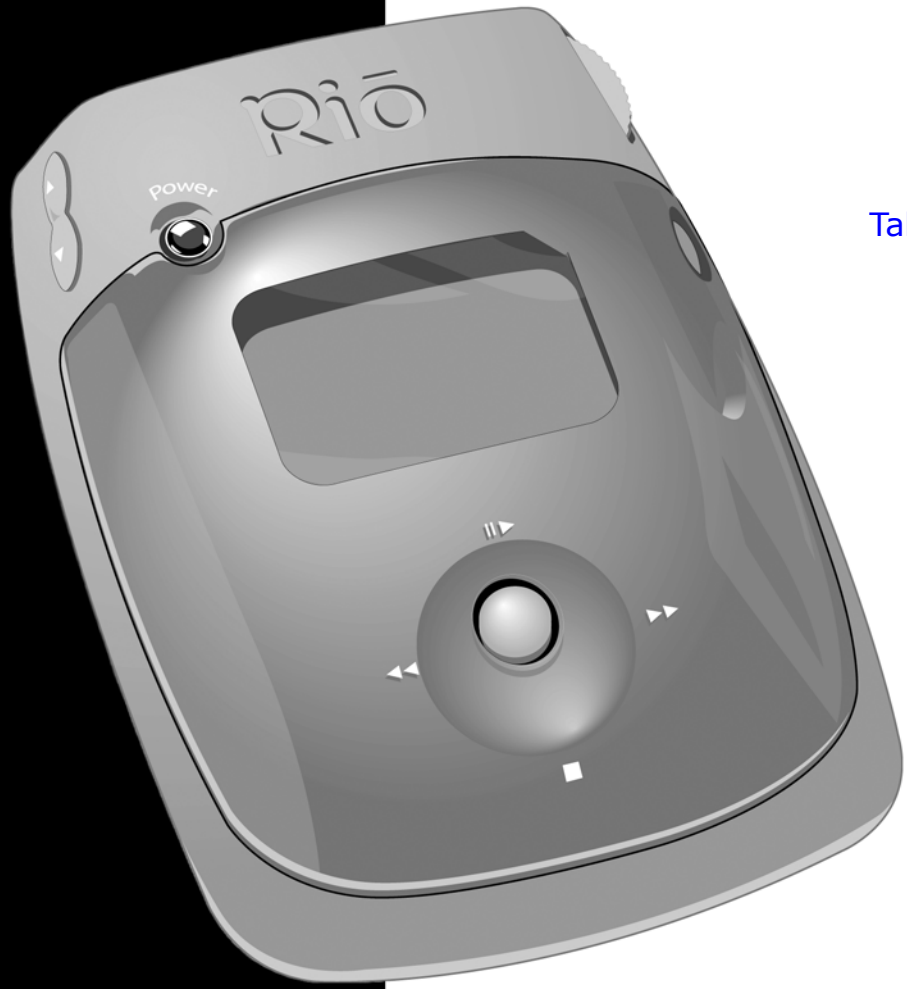
another innovation from

Rio®

www.rioaudio.com

Rio® Nitrus

User's Guide



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Chapter 1 Getting Started

:: Welcome

Thank you for purchasing the Rio Nitrus. Small and powerful, the Rio Nitrus can store more than 400 4-minute songs on its 1.5GB hard drive. The Rio Nitrus includes an AC adapter, earphones, a lighted LCD display, a long lasting built-in battery, and high speed USB 2.0 connectivity.

Learning More

- Refer to the Quick Start Poster for the basics on how to set up and start using the Rio Nitrus.
- Visit the Rio website at www.rioaudio.com.

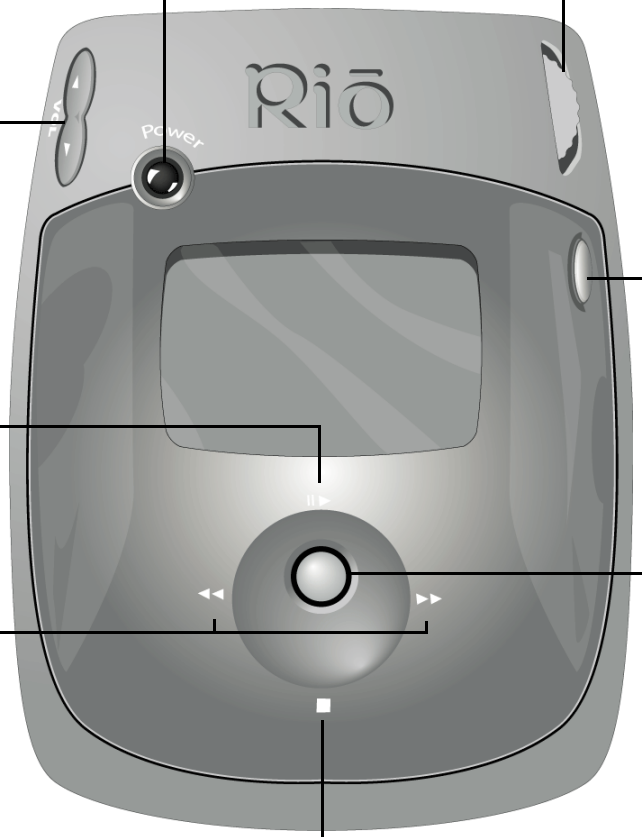
:: Tour of the Rio Nitrus

Power

Press to turn the player on. Press and hold to turn the player off.

Volume + and **-**

Press to adjust the volume level.



Play/Pause

Select with the RioStick to play or pause playback.

Forward and **Reverse**

Select with the RioStick to skip to the next or previous track.

Select and hold to scan forward or reverse.

Stop

Select with the RioStick to stop playback.

Rotary control

Press or rotate to control menu navigation and select menu options.

Menu

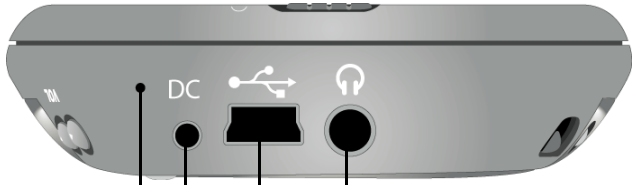
Press to enter Menu mode.

When in Menu mode, press to return to Player mode.

RIOSTICK

In Menu mode, press to select menu options. Move to control menu navigation.

In Player mode press to cycle through Time Code View, Track Format View, and Date View. Move to control PLAY/PAUSE, STOP, FORWARD, and REVERSE playback functions.



Reset hole

Insert pin to reset the player.

DC IN

Connects to AC adapter.

USB

Connects to USB cable.

Earphones

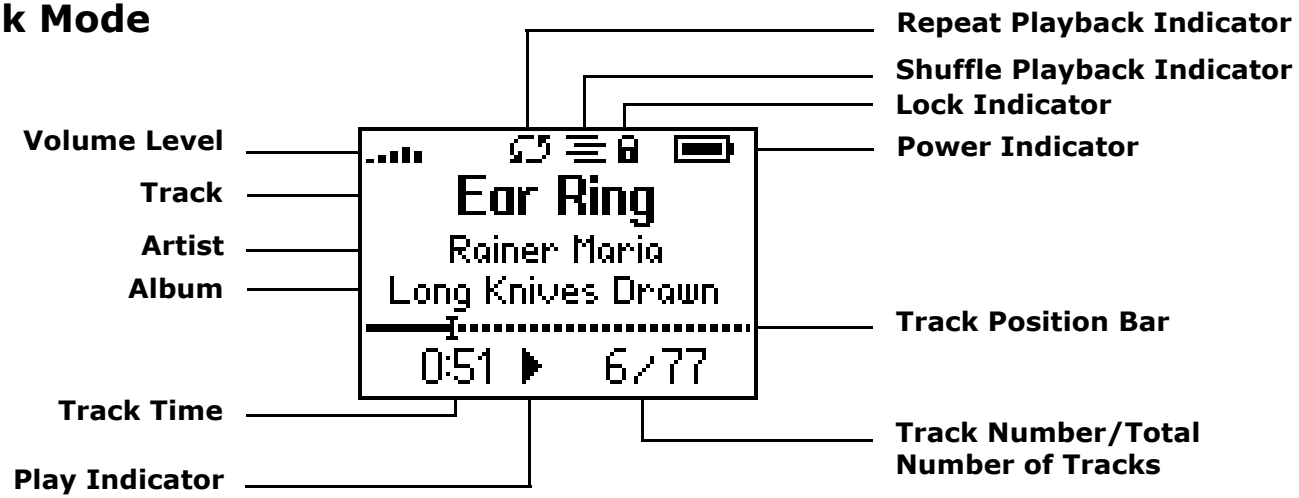
Connects to earphones.

Lock/Unlock

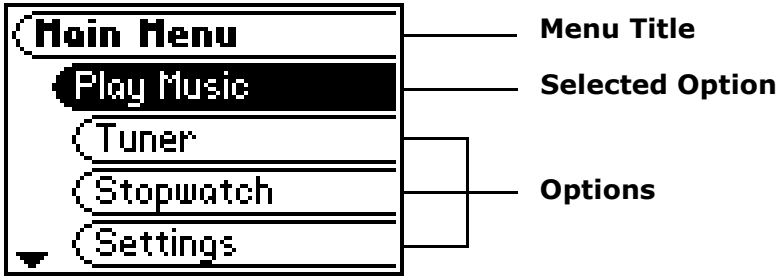
Slide into the LOCK position to disable buttons and prevent accidental operation.

:: LCD Overview

Playback Mode



Menu Mode



Time Code View

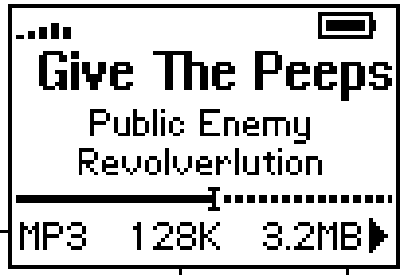
Track Time

Track Number/Total Number of Tracks

Play Screens

Press the RioStick to cycle through Time Code, Track Format, and Date Views.

Track Format View

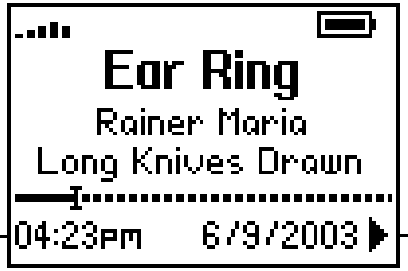


Codec

Bitrate

Track Size

Date View



Time

Month/Day/Year

Chapter 2 Connections

:: Basic Connections

This chapter describes how to connect the Rio Nitrus to power adapters, USB cables, and alternate audio devices. Basic connections include:

AC Power Adapter

Connect the AC adapter to the DC IN port on the player. The AC adapter will recharge the battery, from 0% capacity to 60-70% capacity, within two hours.

1. Plug the AC adapter into an electrical outlet.
2. Connect the AC adapter to the Rio Nitrus.
3. After the battery is fully charged, remove the AC adapter from the Rio Nitrus.

Batteries

The Rio Nitrus uses a built-in lithium-ion rechargable battery that lasts many hours per charge. Lithium-ion batteries drain at a very slow rate even when they are not being used. If you have not used your Rio Nitrus in a long period of time you will need to recharge the battery.

The battery should be charged for at least five hours during its initial charge. The player will recharge anytime the AC adapter is plugged into the player.

Power Indicator

Full

Half

Low

Charging (indicator grows)

Empty (indicator flashes)

Earphones

Connect the supplied earphones to the **EARPHONE** port on the top of the player.

USB

The player must be connected using the included USB cable to the USB port on your computer to transfer files to and from the player and your computer.

USB Detection with the Windows Device Driver

The Rio Nitrus is ready to be connected to your PC after Rio Music Manager has been installed.

If for any reason the Windows Device Driver Wizard is displayed after the USB cable has been plugged into both the Rio Nitrus and the computer, please follow these steps:

1. Confirm the Rio installation CD is in the computer's CD-ROM drive.
2. Check the **CD-ROM Drives** box when the Windows Device Driver Wizard requests the location of the Rio Nitrus drivers.
3. Click **Next** and follow the Windows Device Driver Wizard instructions.

Additional Accessories

You can get the most out of your Rio Nitrus with additional accessories available online at the Rio website. Some of the most popular accessories include the following:

- **Rio Player AC Adapter**
  An extra AC adapter lets you recharge your batteries whenever you are near an electrical outlet. Perfect for digital audio at the office.

- **Rio Car Stereo Adapter**
  Upgrade your car stereo for hundreds of dollars less than buying a new MP3 CD player. The Rio car stereo adapter lets you play your favorite tracks in any vehicle equipped with a standard cassette deck.

Chapter 3 Software Setup

:: Software Installation

Follow these instructions to load software that enables a computer to recognize the Rio Nitrus. The installation also loads Rio Music Manager.

1 Place the Rio installation CD label-side up into the computer's CD-ROM drive.

The Rio installation software launches automatically.

2 Click **Rio Music Manager INSTALL NOW** (required) and follow the on-screen instructions. Additionally, one may click **RealOne Player INSTALL NOW** and follow its installation instructions as well.

3 If prompted, reboot the computer when the installation is complete.

- If Rio installation software does not display automatically, follow these steps to begin the installation manually:

4 Double-click the **My Computer** icon, , on the Windows desktop.

5 Double-click the **CD-ROM** icon, .

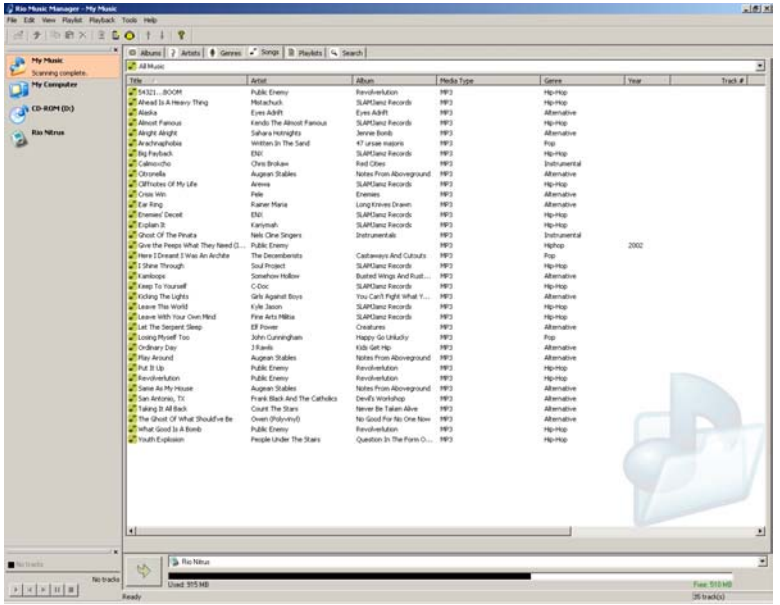
6 Double-click the **Install** icon, .

7 Go to Step 2.

Rio Music Manager

Rio Music Manager is an all-in-one solution that can rip, encode, and manage entire collections of digital audio tracks. Rio Music Manager provides the following capabilities:

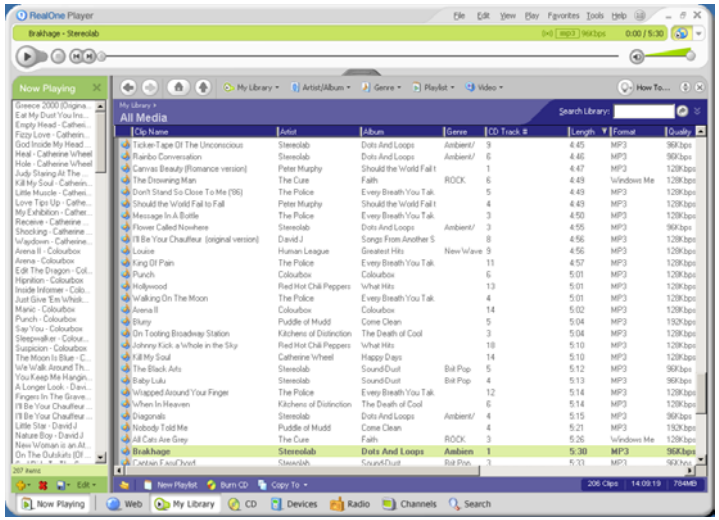
- Save (Rip and Encode) audio CDs into compressed digital audio files. Rio Music Manager encodes WMA tracks by default, and MP3 via an optional upgrade pack.
- Automatically Synchronize the music collection on your computer with your Rio Nitrus.
- Edit ID3 Tag and WMA tags on digital audio tracks.
- Organize and manage digital audio tracks on your computer and Rio Nitrus.
- Search for tracks on your computer and Rio Nitrus.
- Create custom playlists.
- Transfer tracks from your computer to Rio Nitrus.



RealOne Player

The RealOne player is included on the Rio installation CD and provides full speed CD ripping and encoding features perfect for digital audio enthusiasts. Support for the RealOne player can be found here. RealOne offers the following features:

- Save (Rip and Encode) your audio CDs into compressed digital audio formats including MP3 and WMA.
- Organize digital audio tracks on your computer.
- Search for tracks on your computer or on the Internet.
- Create custom CDs.
- Transfer tracks from your computer to the Rio Nitrus.



Chapter 4 Basic Operations

:: Basic Operations

Enjoying audio tracks on the Rio Nitrus is easy. Basic operations of the Rio Nitrus include:

Copy
Transfer
Control
Play

:: Copy

Copying Tracks with Rio Music Manager

Copying tracks from Audio CDs involves two steps commonly known as ripping and encoding. Ripping and encoding refers to the process of ripping (copying) audio from a CD and encoding (saving) the audio content into a compressed digital audio format like MP3 or WMA.

1 Launch the Rio Music Manager.
2 Insert an Audio CD into your CD-ROM drive.
3 Click the CD-ROM icon on the Rio Music Manager Device List.
4 Use any of the following techniques to select tracks:

Track Type	Technique
Single track.	• Left-click the track.
Multiple tracks.	• Press **SHIFT+Click** or **CTRL+Click**.
All tracks.	• Press **CTRL+A**.
No tracks.	• Press **CTRL+N**.
Every track except for the currently selected tracks.	• Select **Edit**, **Invert Selection**.

5 Click to begin copying tracks to your computer.

:: Transfer

Rio Music Manager

Transferring tracks from the PC to the Rio Nitrus using Rio Music Manager involves selecting tracks and transferring them to the player.

1 Launch the Rio Music Manager.

2 Click **My Music** in the left frame to access tracks. Rio Music Manager will scan the computer's hard drives for digital audio tracks that are compatible with the Rio Nitrus player. Tracks are automatically categorized by album title and displayed in the Track List.

3 Select tracks within a category of tracks. Categories include Albums, Artists, Genres, Songs, and Playlists.

For example, if you wish to copy all tracks from a favorite artist onto the player, click the Artists tab and then use any of the techniques in **Step 4** to select the desired tracks.

4 Use any of the following techniques to select tracks:

Track Type	Technique
Single track, album, or artist.	• Left-click the track, album, or artist.
Multiple tracks, albums, and/or artists.	• Press **SHIFT+Click** or **CTRL+Click**.
All tracks, albums, and artists.	• Press **CTRL+A**.
No tracks, albums, or artists.	• Press **CTRL+N**.
Every track except for the currently selected tracks.	• Select **Edit**, **Invert Selection**.

5 After the tracks have been selected they can be transferred to the Rio Nitrus by clicking .

RealOne

1 Launch RealOne software.
2 Connect the player to a computer using the USB cable.
3 Power the Rio Nitrus on.
4 Click **DEVICES** at the bottom of the RealOne window.

The Devices window is displayed.

5 Double-click **Rio Nitrus**.
6 Click **ADD CLIPS** in the command bar at the bottom of the RealOne window.

The Add Clips window is displayed.

- *Tracks can be added from **My Library** by selecting tracks to be transferred and clicking **COPY TO** on the **My Library** command bar.*

7 Select the tracks to be transferred to the Rio Nitrus.
8 Click **Add Clip** to queue the tracks to be transferred and close the Add Clips window.
9 Click **TRANSFER** in the command bar at the bottom of the window to begin downloading the selected tracks to the Rio Nitrus.

Tracks labeled **Will Not Fit** will not be transferred. This status means that the total size of the tracks being transferred to the Rio Nitrus exceeds the available space.

- *Only MP3 and WMA tracks can be transferred. An error message will be displayed if unsupported tracks are transferred unsuccessfully to the player.*

:: Control

- **POWER**
  Press to turn the player on. Press and hold to turn the player off.

- **MENU**
  Press to enter Menu mode. In Menu mode, press to return to Player mode.

- **ROTARY CONTROL** (Rotate)
  Rotate to control menu navigation and select menu options.

- **ROTARY CONTROL** (Press)
  Press to select menu options. In Player mode, press to cycle through Time Code View, Track Format View, and Date View.

- **RIOSTICK** (Press)
  Press to select menu options.

- **RIOSTICK** (Movement)
  Move to control menu navigation. In Player mode, move to control **PLAY/ PAUSE**, **STOP**, **FORWARD**, and **REVERSE** playback functions.

- **PLAY/PAUSE**
  Select with the RioStick to play or pause playback.

- **STOP**
  Select with the RioStick to stop playback.

- **FORWARD** and **REVERSE**
  Select with the RioStick to skip to the next or previous track. Select and hold to scan forward or reverse.

- **VOLUME + and -**
  Press to adjust volume level.

Controls

Locations of all controls can be found on page 2 and 3.

:: Play

The Rio Nitrus player can play audio tracks in multiple playback formats. Formats can be set within a matter of seconds so you can spend more time enjoying your favorite tracks and less time arranging them.

Play All
Album
Artist
Genre
Track
Year
New Music
Playlist

Note

- *If the Rio Nitrus does not power on after **POWER** has been pressed, check the **LOCK/UNLOCK** switch and confirm it is in the **UNLOCK** position.*

Play All

To play all tracks on the player please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Play All**.
5 Press **ROTARY WHEEL** to begin playback.

Album

To play tracks from specific albums please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Album**.
5 Press **ROTARY WHEEL**.
6 Select an album.
7 Press **ROTARY WHEEL** to begin playback.

Artist

To play tracks from a specific artist please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Artist**.
5 Press **ROTARY WHEEL**.
6 Select an artist.
7 Press **ROTARY WHEEL** to begin playback.

Genre

To play tracks from a specific genre please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Genre**.
5 Press **ROTARY WHEEL**.
6 Select a genre.
7 Press **ROTARY WHEEL** to begin playback.

Track

To play a specific track please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Track**.
5 Press **ROTARY WHEEL**.
6 Select a track.
7 Press **ROTARY WHEEL** to begin playback.

Year

To play tracks from a specific year please follow these steps:

1 Press **MENU**.
2 Select **Play Music**.
3 Press **ROTARY WHEEL**.
4 Select **Year**.
5 Press **ROTARY WHEEL**.
6 Select a year (or none).
7 Press **ROTARY WHEEL** to begin playback.

New Music

Select to compose a running order composed of the most recently played tracks during a set amount of time. The most recently played tracks are played first. Settings include **1 day** (the default setting), **2 days**, **1 week**, and **1 month**. To play tracks using **New Music** please follow these steps:

1. Press **MENU**.
2. Select **Play Music**.
3. Press **ROTARY WHEEL**.
4. Select **New Music**.
5. Press **ROTARY WHEEL**.
6. Select a set amount of time.
7. Press **ROTARY WHEEL** to begin playback.

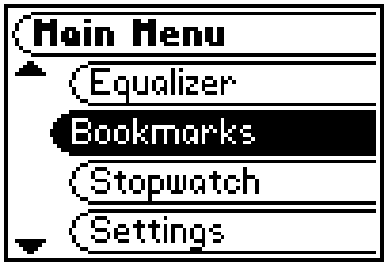
Playlist

To play tracks from playlists created in Rio Music Manager please follow these steps:

1. Press **MENU**.
2. Select **Play Music**.
3. Press **ROTARY WHEEL**.
4. Select **Playlist**.
5. Press **ROTARY WHEEL**.
6. Select a playlist.
7. Press **ROTARY WHEEL** to begin playback.

:: Advanced Features

Advanced features of the Rio Nitrus include:

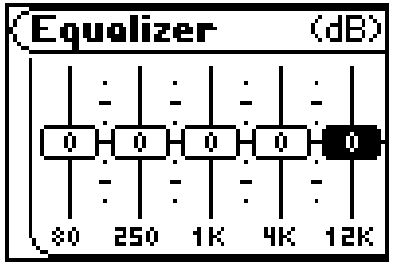


Equalizer
Bookmarks
Stopwatch
Settings
About

:: Equalizer

Custom

Custom mode allows the player's equalizer settings to be adjusted according to personal preferences.



1. Press **MENU**.
2. Select **Equalizer**.
3. Press **ROTARY WHEEL**.
4. Select **Custom**.
5. Press **ROTARY WHEEL**.
6. Adjust 5-band equalizer. Move the RioStick left or right to navigate between frequencies. Move the RioStick up or down to boost or reduce the Gain of the frequency.
7. Press **RIOSTICK** to set the **Custom** equalizer setting and return to player mode.

Normal

Select the **Normal** equalizer option to apply no equalizer adjustments to audio content on the Rio Nitrus.

1. Press **MENU**.
2. Select **Equalizer**.
3. Press **ROTARY WHEEL**.
4. Select **Normal**.
5. Press **ROTARY WHEEL** to set the **Normal** equalizer option and return to Player mode.

Rock

Select the **Rock** equalizer option to change the sound of tracks according to the **Rock** preset settings and return to Player mode.

1 Press **MENU**.
2 Select **Equalizer**.
3 Press **ROTARY WHEEL**.
4 Select **Rock**.
5 Press **ROTARY WHEEL** to set the **Rock** equalizer option.

Jazz

Select the **Jazz** equalizer option to change the sound of tracks according to the **Jazz** preset settings and return to Player mode.

1 Press **MENU**.
2 Select **Equalizer**.
3 Press **ROTARY WHEEL**.
4 Select **Jazz**.
5 Press **ROTARY WHEEL** to set the **Jazz** equalizer option.

Classical

Select the **Classical** equalizer option to change the sound of tracks according to the **Classical** preset settings and return to Player mode.

1 Press **MENU**.
2 Select **Equalizer**.
3 Press **ROTARY WHEEL**.
4 Select **Classical**.
5 Press **ROTARY WHEEL** to set the **Classical** equalizer option.

Pop

Select the **Pop** equalizer option to change the sound of tracks according to the **Pop** preset settings and return to Player mode.

1 Press **MENU**.
2 Select **Equalizer**.
3 Press **ROTARY WHEEL**.
4 Select **Pop**.
5 Press **ROTARY WHEEL** to set the **Pop** equalizer option.

Trance

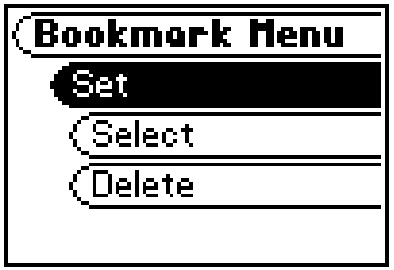
Select the **Trance** equalizer option to change the sound of tracks according to the **Trance** preset settings and return to Player mode.

1 Press **MENU**.
2 Select **Equalizer**.
3 Press **ROTARY WHEEL**.
4 Select **Trance**.
5 Press **ROTARY WHEEL** to set the **Trance** equalizer option.

:: Bookmarks

Bookmarks store specific player settings, including the current running order, the current track, the current time position of the track, the repeat setting, and the shuffle setting. Users can save these settings in a bookmark and restore them whenever they use the player. Bookmarks are great for:

- Placing digital bookmarks in digital audio books or other extended length tracks.
- Maintaining positions in long term running orders.
- Sharing your player with others without losing personal settings.



1 Press **MENU**.
2 Select **Bookmarks**.
3 Press **ROTARY WHEEL**.
4 Select a **Bookmark** option.
5 Press **ROTARY WHEEL**.

Bookmark options include:

- **Set**
  Press **ROTARY WHEEL** to set a bookmark.

- **Select**
  Use the **ROTARY WHEEL** to select a bookmark. Press the **ROTARY WHEEL** to restore the selected bookmark.

- **Delete**
  Use the **ROTARY WHEEL** to select a bookmark. Press the **ROTARY WHEEL** to delete the selected bookmark.

- *The Rio Nitrus automatically saves user settings when it is turned off. These settings are automatically restored when the Rio Nitrus is turned on. Settings saved automatically are not saved as a bookmarks.*

:: Stopwatch

Use the stopwatch to keep track of time-sensitive events while listening to music.

1 Press **MENU**.
2 Select **Stopwatch**.
3 Press **ROTARY WHEEL**.

Lap statistics are displayed at the bottom of the **Stopwatch** screen. When a new lap is set the difference, either faster (**-**) or slower (**+**) between new lap times and the average laptime, is displayed for a few moments.

When in **Stopwatch** mode, the controls work in the following ways:

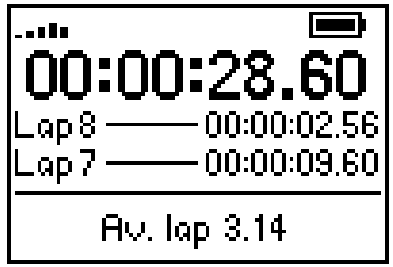
- **MENU**
  Press to return to the **Main Menu**.

- *Pressing **MENU** and using other player functions will not turn the timer off. The timer will continue to run until the RioStick is moved into the Up position (**PLAY/PAUSE**) while in **Stopwatch** mode.*

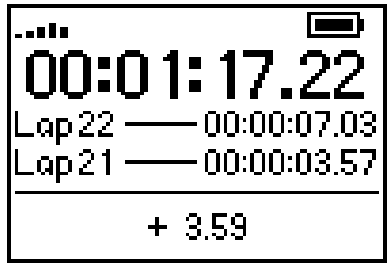
- **RIOSTICK** (Press)
  Press to set a lap time. Press and hold to return to single lap display. Multiple laps and lap averages will be lost.

- **RIOSTICK** (Up)
  Press to start and stop the timer.

- **RIOSTICK** (Down)
  Press to reset timer.



Average Lap Time



Lap Difference

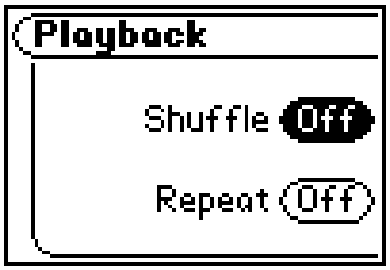
:: Settings

Rio Nitrus settings include:

Playback
Power
Resume
Display
Time
Language
Lock Setup

Playback

Various playback settings can be set to modify the way the Rio Nitrus plays tracks. Tracks can be shuffled at random and/or repeated continuously.



1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Playback**.
5. Press **ROTARY WHEEL**.
6. Adjust **Shuffle** and **Repeat** settings.
7. Press **RIOSTICK** to apply settings return to Player mode.

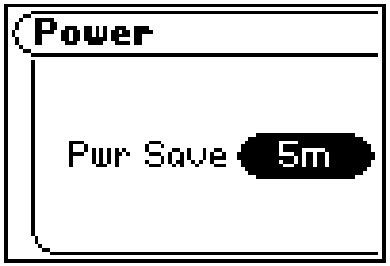
Plackback options include:

- **Shuffle**
  Set selected tracks to play in standard or random order. Settings include **Off** (the default setting) and **On**.

- **Repeat**
  Set selected tracks to repeat playback of all tracks or the current track. Settings include **Off** (the default setting), **All**, and **One**.

Power

By adjusting the **Power** settings, the player can conserve energy and extend the amount of playback time during each battery charge.



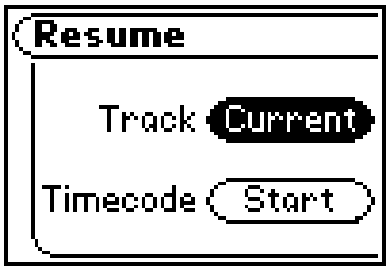
1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Power**.
5. Press **ROTARY WHEEL**.
6. Select **Pwr Save** options.
7. Press **RIOSTICK** to apply settings and return to Player mode.

Power options include:

- **Pwr Save**
  Set the player to automatically power down after being idle for a set number of minutes. Settings include **1m**, **5m** (the default setting), **10m**, **30m**, and **Never**.

Resume

Use the options in the **Resume** menu to set the track that the player will play whenever the player restarts.



1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Resume**.
5. Press **ROTARY WHEEL**.
6. Adjust **Track** and **Timecode** settings.
7. Press **RIOSTICK** to apply settings and return to Player mode.

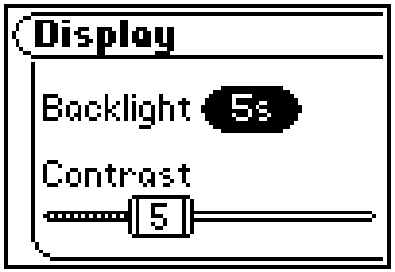
Resume options include:

- **Track**
  Set the player to begin playback of the last track played before shutdown or the first track in the running order when the player restarts. Settings include **Current** (the default setting) and **First**.

- **Timecode**
  Set the player to begin playback of the last track played at the point the track was at during shutdown or at the start of the track. Settings include **Current** (the default setting) and **Start**.

Display

Use the **Display** menu to adjust backlight and contrast settings.



1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Display**.
5. Press **ROTARY WHEEL**.
6. Adjust **Backlight** and **Contrast** settings.
7. Press **RIOSTICK** to apply settings and return to Player mode.

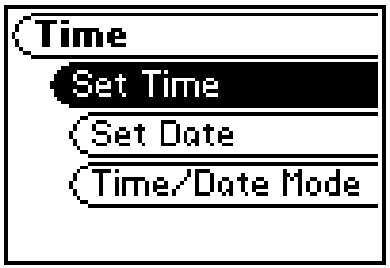
- **Backlight**
  Set the backlight on the player to shut itself off after a set number of seconds. Settings include **Off**, **2s**, **5s**, (the default setting) **10s**, **20s**, and **On**. **On** sets the backlight to remain lit constantly.

- *To conserve battery life, the **On** setting should only be used when the Rio Nitrus is connected an AC adapter.*

- **Contrast**
  Move **RIOSTICK** to control the contrast slider. Use the contrast slider to set how light or dark the images on the LCD will appear. Setting the contrast too high will result in washed out images. Setting the contrast too dark will result in images that are too dark to read.

Time

Use the options in the **Time** menu to set the player's internal clock.



1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Time**.
5. Press **ROTARY WHEEL**.
6. Adjust **Set Time**, **Set Date**, or **Time/Date Mode** settings.
7. Press **RIOSTICK** to apply settings and return to Player mode.

Time settings include:

- **Set Time**
  Options include **Hour**, **Minute**, and **AM / PM**.

- **Set Date**
  Options include **Month**, **Day**, and **Year**.

- **Time/Date Mode**
  Options include **12 hour** (the default setting) and **24-hour** time formats and **USA** (the default setting), **Europe**, and **Japan** date formats.

Language

The Rio Nitrus menus can be set to display in one of six languages.

1. Press **MENU**.
2. Select **Settings**.
3. Press **ROTARY WHEEL**.
4. Select **Language**.
5. Press **ROTARY WHEEL**.
6. Select a **Language** setting.
7. Press **ROTARY WHEEL**.

Language settings include:

- **English** (the default setting)
  Set the player display language to **English**.

- 日本語
  Set the player display language to **Japanese**.

- **Deutsch**
  Set the player display language to **German**.

- **Français**
  Set the player display language to **French**.

- **Español**
  Set the player display language to **Spanish**.

- **Italiano**
  Set the player display language to **Italian**.

Lock Setup

Use the options in the **Lock Setup** menu to enable volume and RioStick control when the lock is enabled.

1. Press **MENU**.
2. Select **Settings**.
3. Press **RIOSTICK**.
4. Select **Lock Setup**.
5. Press **RIOSTICK**.
6. Adjust **Lock Volume** and **RioStick** settings.
7. Press **RIOSTICK** to apply settings and return to Player mode.

Lock Setup settings include:

- **Lock Volume**
  Options include **On** (the default setting) and **Off**. When set to **Off**, the volume level can be adjusted even when the Rio Nitrus has been locked.

- **RioStick**
  Options include **Lock** and ▶/⏸. When set to ▶/⏸, any RioStick movement will be interpreted as the ▶/⏸ control.

:: About

The about screen displays information about the Rio Nitrus. Information includes the total amount of space on the disk, the amount of free space, the number of tracks on the player, and the Firmware version.

1. Press **MENU**.
2. Select **About**.
3. Press **ROTARY WHEEL**.
4. Select **Player** or **Storage**.
5. Press **ROTARY WHEEL**.

About options include:

- **Player**
  Displays firmware version, copyright, and Rio website information.

- **Storage**
  Displays disk usage graphic bar, disk usage (MB used/MB capacity), total number of tracks, and total number of playlists.

:: Troubleshooting

Customer Service Information

The FAQs below will help you solve common issues with your player. If you do not find the answers you need here, you can contact our Customer Service Department via any of the following methods:

Web:http://www.rioaudio.com/support
Technical Support Telephone:(206) 515-1400
Customer Support Telephone:(800) 468-5846

With every Rio product you receive the following support services:

- Unlimited access to the Rio web-based technical information resources, available 24 hours a day every day at http://www.rioaudio.com/support. Here you will find FAQ files, product updates, and other useful information.
- Unlimited e-mail support for the duration of your Rio product hardware warranty period.
- Access to the latest software updates and enhancements for Rio products via our website.

Frequently Asked Questions

Question	Answer
Why will my Rio Nitrus not power on?	• Confirm the **LOCK/UNLOCK** switch on the player is set to **UNLOCK**. The player will not power on if **LOCK/UNLOCK** is in the **LOCK** position. Switch **LOCK/UNLOCK** to the **UNLOCK** position and press **POWER** to turn the Rio Nitrus on. If the Nitrus still does not power on they battery may be dead.
What type of files can I play with the Rio Nitrus?	• You can play MP3 and WMA audio files on the Rio Nitrus.
Can I add MP3 and WMA files to the player at the same time?	• Yes. You can play MP3 and WMA audio content. They can be mixed together.
What are the differences between MP3 and WMA files?	• WMA files are generally half as large as comparable sounding MP3 files. Because WMA uses smaller file sizes, you can store more music in less space on CDs, hard drives, or the Rio Nitrus. The WMA format is exclusive to Windows-based computers.
What is the maximum number of tracks I can put on the Rio player?	• The number of tracks you can store on the player depends on bitrate of the files stored. The About menu lists the total amount of space, the amount of free space, and the number of tracks on the Rio player. **Bitrate** — **Approximate amount of space required per minute of audio content** 64 kbps — 0.5 MB 96 kbps — 0.75 MB 128 kbps — 1 MB 164 kbps — 1.25 MB 192 kbps — 1.75 MB

What kind of batteries can I use with the Rio Nitrus?	• The Rio Nitrus uses non-removable rechargable lithium-ion batteries.
Will the Rio Nitrus play Variable Bitrate (VBR) files?	• Yes. Because there are many standards for VBR files, it cannot be guaranteed that every encoding software package will properly function with the Rio Nitrus. VBR files that do not comply to standards may lack track time, fast forward, and/or rewind capabilities.
Where is the battery indicator on the Rio Nitrus?	• The battery indicator on the Rio Nitrus is located in the top-right corner of the display. The segments in the battery icon show the remaining battery power. The illumination of all segments indicates a fully charged battery. Non-illuminated segments indicate a run down battery. The battery indicator blinks when less than 20% of the charge on the battery remains.
Can I replace the battery in my Rio Nitrus?	• No.
The drive stops spinning during playback. Is this normal?	• Yes. It is normal for the drive to stop spinning during playback. Stopping the drive is part of the player's battery life management system. When the drive is stopped, the Rio Nitrus conserves power and plays tracks from a memory buffer.
Can I charge the Rio Nitrus using the USB cable?	• No. The USB connection will power the Rio Nitrus but will not charge it. The AC adapter must be used to charge the Rio Nitrus. At extremely low battery levels a USB connection will not be able to power the Rio Nitrus.

What should I do if the display permanently locks up, does not display, or displays **UPGRADER**?	• If you cannot read the display, the player firmware may be corrupted. Corrupted firmware may be caused by a failed firmware update. If the player's firmware becomes corrupted for any reason, follow these steps to start the player in Recovery Mode and proceed with the firmware update. **1** Reset the player by inserting a pin or needle into the **RESET HOLE** next to the **DC IN** port. **2** Press **POWER**. The player should power on as normal. If the player continues to lock up or does not display properly: **1** Reset the player by inserting a pin or needle into the **RESET HOLE** next to the **DC IN** port. **2** Press and hold **MENU + POWER** until **UPGRADER** is displayed on the screen. **3** Connect the Rio Nitrus player to the computer using the USB cable. Proceed with the Firmware upgrade.
Why won't the Rio Nitrus play secure, dated, or other DRM (digital rights management) encoded files?	• DRM files may not work properly if the Rio Nitrus' internal clock is no longer accurate. This can happen if the rechargable batteries lose all charge for any period of time. Make sure the batteries are fully charged, then follow these steps: **1** Connect the Rio Nitrus to the computer using the USB cable. **2** Connect to the secure service where the DRM encoded files came from. The Rio Nitrus' clock should reset. DRM files should now play correctly.

Can I upgrade the firmware on the Rio Nitrus?	• Yes. If available, firmware for your Rio can be downloaded from the Rio Audio website. **Note:** Quit all applications before running the firmware update. While running the firmware update, do not close the program, turn off the player, or unplug the USB cable. **Downloading the update** **1** Click on the following link: Firmware Upgrade. **2** Click on the link to the Rio Nitrus. **3** Locate **UPDATES** and click **Firmware**. Select and download the latest software. Download the software that is specific to the operating system you use on your PC: *.exe (Windows) *.hqx (Mac) *.zip (Windows; must use WinZip to open) *.txt (All operating systems—a text file including update information and instructions.) **Installing the update (PC)** **1** Connect the player to your computer with the USB cable. **2** Turn the player on. **Waiting** will display on the player screen. **3** Double-click the file that you downloaded from the Rio website. The update should take approximately 30 seconds to load.

:: Glossary of Digital Audio Terms

Bass

Bass is the particular low-range area of the sound spectrum where low musical notes and sounds are located. Increasing the bass value will make the low vocals and drums more prominent in your music. You can select the amount of bass in your music by selecting various Equalizer options.

Bitrate

Bitrate denotes the number of bits per second used by a digital music file. The size and quality of a compressed digital audio file is determined by the bitrate used when encoding the file. Generally, the higher the bitrate used the higher the sound quality and the larger the file size. For example, a bitrate of 96kbps (96,000 bits per second) is generally thought of as "CD quality" for WMA audio files, and takes up about 0.75 megabytes (MB) per minute of music. At a 64kbps bitrate, the sound quality of WMA is similar to that of an FM radio signal, but approximately two minutes of music will fit in 1MB of space.

Codec

Depending on the context and kind of technology involved, codec can be defined as a compressed digital audio file format (like MP3, WMA, etc.), a "coding/decoding" chip used to translate between digital and analog transmissions (used in modems), or a compression/decompression algorithm. Codecs compress audio data into a file, often for efficient transmission over a network, and then decode it for playback. While all the codecs perform similar compression of digital audio, there are differences in the technology.
The Rio Nitrus supports the following digital audio codecs:

- MP3
- WMA

Firmware

Firmware is the read-only software that is installed on the player. Like software it can be updated, but unlike software, it can never be deleted from the player.

Gain

Gain is a measurement of the amplitude of frequency ranges. Gain adjustments boost or reduce frequencies to provide a more desirable audio output.

ID3 Tag

The ID3 tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, album title, encoding bitrate, track time duration, and so on. ID3 tag information is displayed on the Album/Artist/Track title line on the player's LCD.

MP3

MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well known compressed digital audio file format. This format allows for near "CD quality" sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track from CD-ROM can reduce the file size by approximately a 12:1 ratio with virtually no perceptible loss in quality. MP3 compression removes the redundant and irrelevant parts of a sound signal that the human ear doesn't hear. This digital sound encoding and compression process was developed by the Fraunhofer Institute for Integrated Circuits and Thomson Multimedia.

Rip and Encode

Rip and encode refers to the process of extracting audio from a music CD (ripping) and encoding it into a compressed digital audio format like MP3 or WMA.

Synchronize

Rio Music Manager can automatically (or manually) delete old content, transfer new audio content, and keep the content on your Rio Nitrus fresh and dynamic. Rio Music Manager must be open for synchronization to occur.

Treble

Treble notes occupy the higher portion of the sound spectrum. Increasing the treble value will raise the levels of the high sounds in your music files. You can select the amount of treble in your music by selecting various Equalizer options.

VBR

Variable Bitrate (VBR) encoding converts tracks at a variable rate, using higher bitrate encoding for complex portions and lower bitrate encoding for pauses in songs.

WMA

Windows Media Audio (WMA) is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.

:: Limited Warranty and Software License

Warranty

Digital Networks North America, Inc. warrants that your product will be free from defects in materials and workmanship for a period of ninety (90) days from the date of original retail purchase. Digital Networks North America, Inc. warrants refurbished products, marked and sold as such, for thirty (30) days from the original purchase date. This warranty is extended to the original end user purchaser only and is not assignable or transferable to any other party.

If you discover a defect covered by this warranty, Digital Networks North America, Inc. will repair or replace the product at our sole discretion using new or remanufactured product or components. Digital Networks North America, Inc.'s liability is limited solely to the repair or replacement of the defective product. If Digital Networks North America, Inc. cannot reasonably repair or replace the defective product then Digital Networks North America, Inc. may, at its sole discretion, refund the current suggested retail price for the product. Digital Networks North America, Inc. warrants any replaced or repaired product for a period of thirty (30) days from shipment, or through the end of the original warranty period, whichever is longer.

Warranty Service

To obtain service under this warranty, you must contact a Digital Networks North America, Inc. Customer Care Center within the applicable warranty period to receive a warranty service authorization. You will be required to provide a dated original proof of purchase. Products shipped to Digital Networks North America, Inc. must be shipped postage-paid and packaged appropriately for safe shipment. Digital Networks North America, Inc. is not responsible for products received without a warranty service authorization and may be rejected. Repaired or replacement products will be shipped to you at Digital Networks North America, Inc.'s expense. All products or parts that are replaced become the property of Digital Networks North America, Inc.

Scope of and Limitation on Warranty

This warranty does not cover damage caused by abuse, misuse, unauthorized attempts to open, modify, or repair the product, moisture, extreme heat or cold, corrosive environments, shipping, or high voltage surges from external sources such as power line, telephone line, or connected equipment. This warranty does not cover wear and tear on covers, housing or wiring. This warranty also does not apply to any product with an altered or defaced serial number. Digital Networks North America, Inc.'s liability is limited to the repair or replacement of this product. In no event will Digital Networks North America, Inc. be liable for any amount greater than the currently suggested retail price of this product. We will not be liable to you or anyone else for any damages that result from the failure of this product or from the breach of any express or implied warranties. These include damage to other equipment, lost data, lost profits, or any consequential, incidental, or punitive damages. This written warranty represents the entire warranty agreement between Digital Networks North America, Inc. and you. This warranty is given in lieu of all other warranties, express or implied, including without limitation implied warranties of merchantability and fitness for a particular purpose. This warranty is limited to the term specified above. No warranties, either express or implied, will apply after this period. This warranty may not be altered in any way other than in writing by an officer of Digital Networks North America, Inc. This warranty gives you specific legal rights and you may also have other rights, which vary, from state to state. Some states limit what warranties may be excluded as well as how long an implied warranty lasts, so the above limitation may not apply to you.

:: FCC and Industry Canada Compliance

Federal Communications Commission (FCC)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 This device may not cause harmful interference, and
2 This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

:: Safety

Warning

TO REDUCE THE CHANCE OF SHOCK OR INJURY, DO NOT USE or OPERATE THIS DEVICE IN OR NEAR WATER OR WET LOCATIONS.

CAUTION

RISK OF EXPLOSION, DAMAGE OR BATTERY LEAKAGE IS POSSIBLE IF BATTERY IS REPLACED INCORRECTLY OR BY AN INCORRECT TYPE. NEVER ATTEMPT TO CHARGE A NON-RECHARGEABLE ALKALINE BATTERY. DISPOSE OF USED BATTERIES ACCORDING TO INSTRUCTIONS OR LOCAL LAWS. Use of headphones while operating a vehicle is not recommended and is unlawful in some states and areas. Be careful and attentive while driving. Stop operation of the player if you find it disruptive or distracting while operating any type of equipment.
Listening to audio at full power over extended periods of time can be damaging to the hearing of the user.

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USA